KMITA, Jan, doo. dr ins. (Wroolaw)

Widening of an existing road bridge.  Ins i bud 21 no.8:280-284  Ag '64.

KMITA, Jan  (Wroclaw)

Transversal load distribution in cantilever plate-covered
bridges.  Archiw ins lad 10 no.4:443-463  '64.

KMITA, S,

BYSTRZANOWSKA, T.; KMITA, S.

Modern view on the physiology of hearing. Polski tygod.lek. 5 no.47-48: 1662-1677 27 Nov 50.                                    (CLML 20:6)

1. Of the Otolaryngological Clinic of Lodz Medical Academy (Director Prof. H.Lewenfisz).

BYSTRZANOWSKA, T.;DMITA, S.

Modern concepts of physiology of taste and smell. Polski tygod.
lek,6 no. 37:1192-1198 10 Sept. 1951.          (CLML 21:3)

1. Of the Otolaryngological Clinic (Director--Prof. Henryk
Lewenfiss, M. D.) of Lodz Medical Academy.

DMITA, S.

Effect of gasoline vapors on the upper respiratory tract and on the
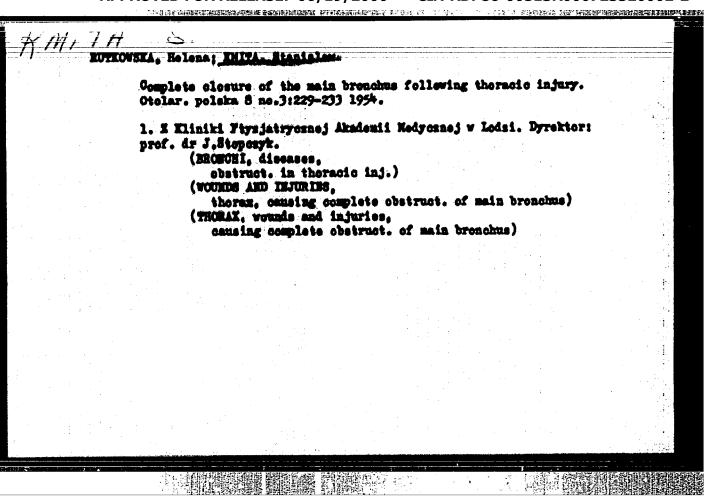olfactory apparatus. Med. pracy 4 no.2:119-130 1953.    (OLML 24:5)

1. Of the Otolaryngological Clinic (Head--Prof. H. Levenfisz, M.D.),
the Institute of Pathological Anatomy (Head--Prof. A. Pruszczynski, M.D.)
and the Polyclinic of Occupational Diseases (Director--Prof. B. Paluch,
M. D.), Lodz Medical Academy.

KNITA, S.

Effect of gasoline on the upper respiratory tract. Med. pracy 4 no.3:
171-180 1953.                                              (CLML 24:5)

1. Of the Otolaryngological Clinic (Head--Prof. H. Levenfiss, M. D.) and
of the Institute of Pathological Anatomy (Head--Prof. A. Pruszczynski,
M. D.) and of the Polyolinic of Occupational Diseases (Director--Prof.
B. Paluch, M. D.), Lodz Medical Academy.

*K Mi 7 H     S.*

RUTKOWSKA, Helena; KMITA, Stanislaw.

Complete closure of the main bronchus following thoracic injury.
Otolar. polska 8 no.3:229-233 1954.

1. I Kliniki Ftyzjatrycznej Akademii Medycznej w Lodzi. Dyrektor:
prof. dr J.Stepczyk.
        (BRONCHI, diseases,
           obstruct. in thoracic inj.)
        (WOUNDS AND INJURIES,
           thorax, causing complete obstruct. of main bronchus)
        (THORAX, wounds and injuries,
           causing complete obstruct. of main bronchus)

DMITA, Stanislaw (Lodz, Al.Kosciuszki 29)

Case of cyst of the oral cavity. Otolar.polska 8 no.4:337-340 1954.

1. Ze Szpitala Wojska Polskiego w Lodzi.
   (MOUTH, cysts,
       case of giant cyst)
   (CYSTS,
       mouth, case of giant cyst)

SOKOLOWSKI, Stefan; FREYTAG, Tadeuss; DUTA, Stanislaw

Experiments with bacteriostatic activity of self-polymerising
acrylic implants. Neur. &c.polska 5 no.3:253-258 My-Je '55.

1. Z Vojskowego Szpitala Kliinicznego w Lodsi, Lods, Wierzbowa
33/36
     (ACRYLIC RESINS
          self-polymerising implants, bacteriostatic eff.)

DMITA, Stanislaw

    Surgical treatment of ozena.  Otolar. polska 9 no.2:149-152 '55.

1. Ze Szpitala Klinicznego W.P. w Lodzi Lodz, Al. Kosciuszki 29.
        (RHINITIS, ATROPHIC, surgery
            acrylic implants)

KMITA, Stanislaw; KOLBOW, Harry.

Clinical observations on action of isonicotinic acid hydrazide in laryngeal tuberculosis. Otolar. polska 9 no.3:227-232 1955.

1. Z Panstwowego Sanatorium Przeciwgruzliczego w Tuszynku, Dyrektor: dr. S.Pislo.
        (TUBERCULOSIS, LARYNGEAL, therapy,
            isoniazid)
        (NICOTINIC ACID ISOMERS, therapeutic use,
            isoniazid in laryngeal tuberc.)

FREYTAG, Tadeusz; KMITA, Stanislaw; SOKOLOVSKI, Stefan

Application of the plastic substance dentacril as tissue
implants. Polski przegl.chir. 27 no.4:323-326 Apr '55.

1. Ze Szpitala klinicznego W.P. w Lodzi; Szpital Kliniczny
W.P. w Lodzi.
(ACRYLIC RESINS
implants in dogs, histol.eff.)

DUITA, Stanislaw; SOKOLOWSKI, Stefan; FREITAG, Tadeusz

Studies on heat production in self-polymerising masses
used for implants. Neur. &c. polska 6 no.1:41-44 Jan-Feb
56.

1. Z Wojskowego Szpitala Klinicznego v Lodzi, Lods, Wierzbowa
33/36.
        (ACRYLIC RESINS,
            self-polymerising, heat prod. in prep. for implants.
            (Pol))

RADZIMINSKI, Aleksander; KMITA, Stanislaw

Intracranial complications during otitis media in infants. Pediat. polska
32 no.3:237-244 Mar 57.

1. Z I Kliniki Chorob Dzieci A. M. w Lodzi Kierownik: doc. dr med.
K. Wilkoszewski i s Kliniki Otolaryngologicznej A. M. w Lodzi Kierownik:
prof. dr med. A. Radziminski. Adres: Lodz, ul. Armii Czerwonej 15.
        (OTITIS MEDIA, in inf. & child
            caused abscess of brain (Pol))
        (BRAIN, abscess
            caused by otitis media in inf. (Pol))

KMITA, Stanislav; MARKIEWICZ-BRZEZINSKA, Hanna

Sinusitis in infants & young children. Otolar. polska 12 no.2:151-161 1958.

1. Z I Kliniki Chorob Dzieci A. M. w Lodzi Kierownik: doc. dr M. Wilkoszewski i ze Szpitala dla Dzieci Im. Prof. Dr St. Popowskiego Dyrektor: dr med. Z. Pasenicka-Gundlachowa.
(SINUSITIS, in inf. & child
maxillary (Pol))

KMITA, Stanislaw; JAGMIN-KOPCZYNSKA, Ewelina; KOTNOWSKA-RAPACKA, Wieslawa;
KOSZANSKA, Janina

Surgery in a case of teratoma of the larynx in a 41-day-old infant.
Otolar.polska 13 no.3/4:624-629 '59.

1. Z I Kliniki Chorob Dzieci A.M. w Lodzi. Kierownik: doc.dr med.
Z. Sroczynski. Konsultant Laryngolog: doc.dr med. S. Kmita.
            (TERATOID TUMORS in inf.& child)
            (LARYNX neopl.)

DMITA, Stanislav; OSTROWSKA-STACHOWA, Helena

A case of nasopharyngeal tumor (lymphoepithelioma) in a 6-year-old child.
Pediat. polska 34 no.5:722-724 May 59.

1. X I Kliniki Chorob Dzieci A.M. w Lodzi p.o. Kierownik: doc. dr med.
K. Stoczynski. Adres: Lodz, ul. Armii Czerwonej 15.
         (CARCINOMA, EPIDERMOID, in inf. & child,
             nasopharynx (Pol))
         (NASOPHARYNX, neoplasms,
             epidermoid carcinoma in child (Pol))

KMITA, Stanislaw; BUDHARSKA, Anna

Reticulosarcoma of the mediastinum. Otolar.polska 14 no.2 :259-262
'60.

1. Z I Kliniki Chorob Dziecięcych A.M. w Lodzi, Kierownik Katedry:
prof. dr med. Fr. Redlich; Kierownik I Kliniki: doc.dr med.
K. Sroczynski; Kierownik Odds. Laryngologicznego: doc dr med.
St Kmita.
        (MEDIASTINUM neopl)
        (SARCOMA RETICULUM CELL in inf & child)

BRZEZINSKA, Hanna; CZAPLICKI, Brunon; KMITA, Stanislav; KRAJ-FRANCOVA, Irena;
MALINOWSKI, Wladyslaw

Surgical changes in the mastoid in the light of preoperative
otolaryngological examinations in infants. Otolar polska 15 no.1:
67-71 '61.

1. Z II Kliniki Chorob Dzieci AM w Lodzi Kierownik: prof. dr
F. Redlich Z I Kliniki Chorob Dzieci AM w Lodzi Kierownik: doc. dr
K. Sroczynski Z Oddzialu Otolaryngologii Dzieciecej przy katedrze
Chorob Dzieci AM w Lodzi Kierownik: prof. dr F. Redlich Kierownik
Oddzialu: doc. dr S. Kmita.

     (MASTOIDITIS in inf & child)   (INFANT NEWBORN dis)

KMITA, Stanislaw; JANKOWSKI, Jan

    Endotracheal anesthesia in tonsillar surgery in children.  Otolaryng.
pol. 16 no.3:531-536 '62.

    1. Z Oddzialu Otolaryngologii Dzieciecej przy Katedrze Pediatrii AM
w Lodzi Kierownik Katedry: prof. dr med. F. Redlich Kierownik
Oddzialu: doc. dr med. S. Kmita.
       (ANESTHESIA INTRACHACHEAL)     (TONSILLECTOMY)

KMITA, Stanislaw; FILIPIAK-MIASTOWSKA, Irmina; WOZNIAK, Zdzislaw.

Radiodiagnosis of inflammatory aural changes in children.
Otolaryng. pol. 17 no.4:487-490 '63.

1. Z Oddzialu Otolaryngologii Dzieciecej AM przy II Klinice
Chorob Dzieci w Lodzi. Kierownik: doc.dr.med. S.Kmita.

**KMITA, Stanislav**

The problem of pediatric otiatrics. Otolaryng.pol. 17 no.4:
374-376 '63.

1. Z Oddzialu Otolaryngologii Dzieciecej przy II Klinice
Chorob Dzieci Akademii Medycznej w Lodzi. Kierownik Oddzialu:
doc.dr.med.S.Kmita.

KMITA, Stanislav, doc. dr.

Studies on the arterial vascularization of the tympanic cavity.
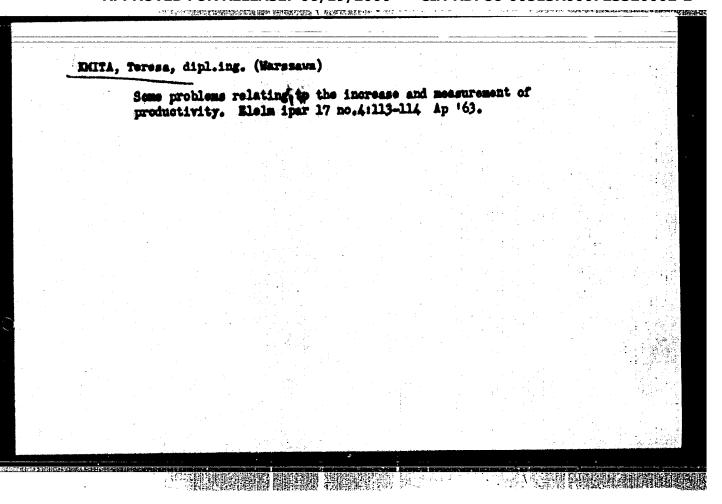Otolaryng. Pol. 19 no.1:17-22 '65.

1. Z Oddzialu Otolaryngologii Dzieciecej Akademii Medycznej
w Lodzi przy II Klinice Chorob Dzieci (Kierownik Kliniki:
prof. dr. Fr. Redlich; Kierownik Oddzialu: doc. dr. St. Kmita)
i z Zaklad" Anatomii Prawidlowej Akademii Medycznej w Lodzi
(Kierownik Zakladu: prof. dr. T. Wasilewski).

KMITA, Stanislav, doc.  dr. med.; JACMIN-KOPCZYNSKA, Ewelina

A case of congenital lack of incus and stapes immobilization
(Siebenmann's type). Otolaryng. Pol. 19 no.2:253-255  '65.

1. Z Oddzialu O claryngelogii Dziecieoej przy II Katedrze Chorob
Dzieci Akademii Medycznej w Lodzi (Kierownik Katedry: prof. dr.
med. F. Redlich [deceased]; Kierownik Oddzialu: doc. dr. med.
S. Kmita).

SMITA, Teresa, dipl.ing. (Warszawa)

Some problems relating to the increase and measurement of productivity.  Klein iper 17 no.4:113-114  Ap '63.

L 29987-66   EWT(1)/EWT(m)/EWP(t)/EII___IJP(c)   JD
ACC NR: AP6012491                              SOURCE CODE: UR/0181/66/008/004/1239/1245

AUTHOR: Pavlichenko, V. I.; Ryzhikov, I. V.; Maita, T. G.; Karageorgiy-Alkalayev, P. M.; Leyderman, A. Yu.

ORG: none

TITLE: Electroluminescence of silicon carbide diodes

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1239-1245

TOPIC TAGS: silicon carbide, pn junction, diode junction, volt ampere characteristic, photoelectric property, electroluminescence

ABSTRACT: The authors investigated the dependence of the intensity of electroluminescence on the current and voltage in α-SiC (types 4H, 6H, and 21R). The investigated junctions were prepared by separate and simultaneous diffusion of aluminum and boron in the n-type silicon carbide crystals, alloyed beforehand with nitrogen and boron. The results were a pnn$^+$ structure, with the holes injected through the p-n junctions and the electrons through the n-n$^+$ contact. The theory of the current dependence of the recombination-radiation intensity in a p-n-n$^+$ diode is briefly developed. The lux-ampere and volt-ampere characteristics of the various diodes were measured as functions of the current and voltage on the diode.

Card 1/2

32-12-45/71

AUTHORS:  Kmito, A.A., Ledokhovich, A.A.

TITLE:  Improved Condensation Hydrometer (Usovershenstvovannyy kondensatsionnyy gigrometr).

PERIODICAL:  Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1505-1506 (USSR)

ABSTRACT:  An apparatus suggested in 1954 and built in 1955 was further improved. In its latest finish, which is described here, it consists of two half-round semiconductor elements, which are pasted together, so that they form a cylindrical body. The semiconductor layers of each element have a thickness of 10 mm and are connected with one another by intermediate copper layers of 2 mm thickness. The lower semiconductor plates are fastened immediately to the radiator below them, the domed form of which warrants a good contact with the air, so that the lower layers of the element have the same temperature as their surroundings. The upper (cooling) semiconductor layer is provided with a metal mirror to which a thermometer is fastened. In about 40 minutes after the current has been turned on, a temperature difference between the upper (cooling) and the lower (warm) layer of about 50° occurs, which results in a difference of 30-33° on the mirror and in the surrounding air. This difference is reduced as soon

Card 1/2

Improved Condensation Hydrometer                                    32-12-45/71
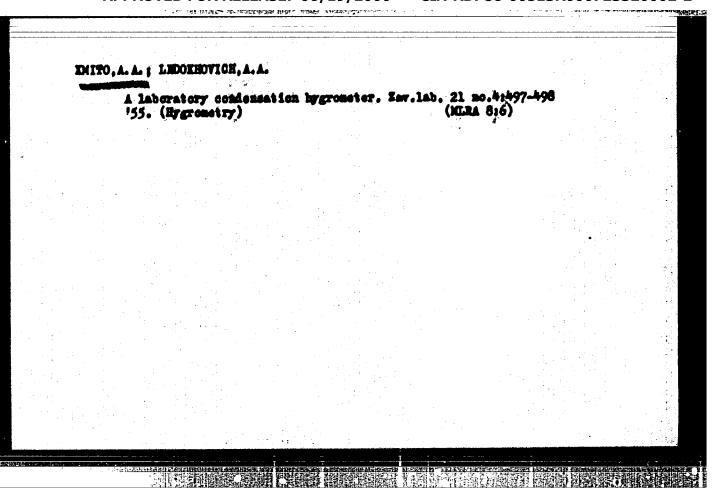
as the surrounding air is set in motion and blows upon the mirror.
For the purpose of measuring moisture in a rational manner a motion
of air of 2 m/sec is considered to be the most suited. Feeding cur-
rent into the apparatus is carried out according to the following
scheme: the current is conducted to a synchronous vibration trans-
former and is then led through an exciter contact to the reduction
transformer. From here the current is conducted by way of a resist-
ance (rheostat) to the semiconductor element (cooler). Behind the
semiconductor element a switch with a relay is switched into the
current. For the automatic control of the hydrometer mirror a photo-
element of the "CU.B-51" type is used here, which works according to
the principle of the "dark field", i.e. that, if the mirror is clear,
the light, which is reflected from the lamp, falls beside the photo-
element. At the moment in which condensate is formed on the mirror,
light dispersion sets in, and the light falling upon the photoelement
causes a change of the equilibrium of the magnetic field of the pho-
toelement, which is indicated by the microammeter provided for this
purpose. There are 3 figures and 3 Slavic references.

AVAILABLE:    Library of Congress

Card 2/2      1. Hydrometers-Improvement

DMITO,A.A.; LEDOKHOVICH,A.A.

A laboratory condensation hygrometer. Zav.lab. 21 no.4:497-498
'55. (Hygrometry)                                    (MLRA 8:6)

j2-j-1b/2

AUTHORS:     Kmito, Ye. I., Kmito, A. A.

TITLE:       The Determination of the Electric Conductivity of Oxide Coatings
             on Aluminum in a Moist Atmosphere (Opredeleniye
             elektroprovodnosti okisnykh plenok na alyuminii vo vlazhmoy
             atmosfere)

PERIODICALS: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 303-306 (USSR)

ABSTRACT:    Three methods are suggested for the above mentioned determination;
             the measuring range being large, the first method is employed for
             rather rough estimates, whereas the second gives accurate results
             in the case of lower, and the third in the case of higher values
             of moisture. Investigation samples of duraluminum were cylindrical
             in shape, their surface was previously treated anodically in order
             to obtain a layer of oxide. According to the first method a nickel
             wire serves as an anode and is connected to a series of piles
             (batteries). The resistance which is produced in this way and is
             influenced by the oxide layer and by the moisture, is measured by
             way of resistance regulators and microammeters at a voltage of

Card 1/2

The Determination of the Electric Conductivity of
Oxide Coatings on Aluminum in a Moist Atmosphere          32-3-18/52

7.5 V (measuring accuarcy about ± 15%). The second method is
based upon a sort of tube ohmmeter working with an electron tube
2π1π and an accuracy of up to ± 1%. In the third method a radio-
transmitter is used and, in accordance with resistance, higher or
lower sounds are emitted. A hysteresis effect, which was noticed
with an increase and decrease of moisture is explained by elec-
trode polarisation. There are 3 figures, 1 table, and 1 reference,
1 of which is Slavic.

AVAILABLE:  Library of Congress

1.  Duraluminum-Oxidation-Methods.  2.  Oxide coatings-Conductivity-
    Atmosphere-Effects

Card 2/2

ACC NR: AI6013718                          Monograph                    UR/

Kmito, Aleksandr Aleksandrovich                                        30

                                                                       B+1
Exploration methods of the atmosphere with the use of rockets and
  satellites  (Metody issledovaniya atmosfery s ispol'zovaniyem raket
  i sputnikov) Leningrad, Gidrometeoizdat, 1966. 365 p. illus.,
  biblio. 1650 copies printed

TOPIC TAGS: rocket meteorology, satellite meteorology, meteorological
  instrument, upper atmosphere, cloud cover, atmosphere

PURPOSE AND COVERAGE:  This book, intended for advanced students and
  scientific workers in meteorology, geophysics, and the aerospace
  sciences, presents the physical principles upon which instrumenta-
  tion used to investigate the upper atmosphere are based.  Particular
  attention is given to meteorological instruments used on geophysical
  rockets and satellites.  The work is based on 380 Soviet and non-
  Soviet sources and treats instrumentation and techniques applied
  both within and outside the Soviet Union.  G. M. Zabrodskiy, N. P.
  Pavlov, N. A. Petrov, and A. A. Pokhunkov participated in the
  compilation of the work.

TABLE OF CONTENTS  (abridged):

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ACC NR: AM6013718

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Card 2/3

L 25571-66

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Ch. VIII. Measurement of electrostatic and magnetic fields -- 181

Part Three: Measurements in the optical range

Ch. IX. Measurements of the x-ray and ultraviolet radiant energy - 207

Ch. X. Measurement of the radiant energy in the visible and infrared regions of the spectrum -- 239

Part Four: Obtaining images of the planets and cloud cover

Ch. XI. Scanning device -- 283

Ch. XII. Photographic apparatus -- 295

Ch. XIII. Television apparatus -- 308

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SUB CODE: 04/  SUBM DATE: 24Dec65/  ORIG REF: 272/  OTH REF: 108

Card 3/3  FW

Tennikova, Ye. I,

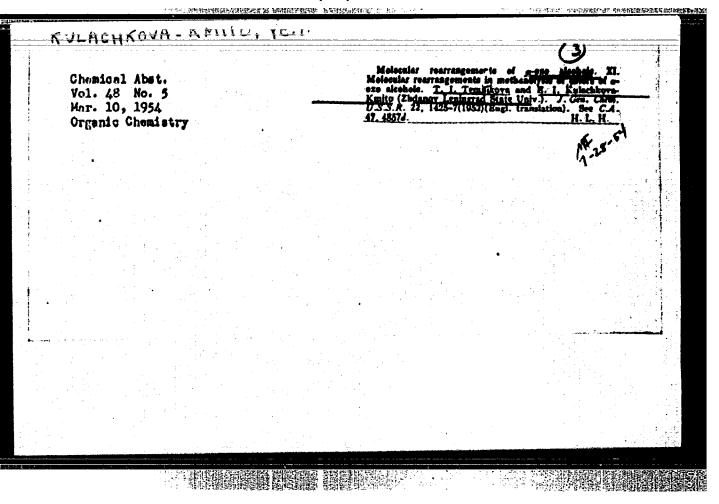USSR/Chemistry - Isomeric Ketols, Isomerism                Jul 49

"Research in the Field of Isomeric Conversions of Alpha-Ketols: VII,
Effect of Chlorine in the Para-Position on the Stability fo Aliphatic-
Aromatic Alpha-Ketols. Methyl-n-Chlorobenzoylcarbinol (I)," T. I.
Tennikova, Ye. I. Kulachkova, Chair of Structure of Org Compounds, Lenin-
grad Ord of Lenin State U imeni A. A. Zhdanov, 10½ pp

"Zhur Obshch Khim" Vol XIX, No 7

I and n-chlorophenylacetylcarbinol are produced by reaction of alpha-
bromoethyl-n-chlorophenyl-ketone with potassium formate in a medium of
methyl alcohol. When these two ketoalcohols are subsequently heated
at 100°C, pure I is resulting product since other ketoalcohol is subjected
to isomeric conversion in re-esterfication stage. Interaction of alpha-
bromoethyl-n-chlorophenylcarbinol with potassium acetate forms only one
ester, corresponding in structure to original ketone. Submitted 7 May 48.

PA 2/5CT52

KULACHKOVA - KMITO, YE.I.

Chemical Abst.
Vol. 48  No. 5
Mar. 10, 1954
Organic Chemistry

Molecular rearrangements of α-oxo alcohols. XI.
Molecular rearrangements in methanetriol derivatives of α-
oxo alcohols. T. I. Temnikova and K. I. Kulachkova-
Kmito (Zhdanov Leningrad State Univ.). J. Gen. Chem.
U.S.S.R. 23, 1425-7(1953)(Engl. translation).  See C.A.
47. 4857d.                                        H. L. H.

32-3-18/52

AUTHORS:     Kmito, Ye.I., Kmito, A.A.

TITLE:       The Determination of the Electric Conductivity of Oxide Coatings
             on Aluminum in a Moist Atmosphere (Opredeleniye
             elektroprovodnosti okisnykh plenok na alyuminii vo vlashnoy
             atmosfere)

PERIODICAL:  Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 303-306 (USSR)

ABSTRACT:    Three methods are suggested for the above mentioned determination;
             the measuring range being large, the first method is employed for
             rather rough estimates, whereas the second gives accurate results
             in the case of lower, and the third in the case of higher values
             of moisture. Investigation samples of duraluminum were cylindrical
             in shape, their surface was previously treated anodically in order
             to obtain a layer of oxide. According to the first method a nickel
             wire is wound round the sample (which acts as a cathode); this
             wire serves as an anode and is connected to a series of piles
             (batteries). The resistance which is produced in this way and is
             influenced by the oxide layer and by the moisture, is measured by
             way of resistance regulators and microammeters at a voltage of

Card 1/2

KMITOVENKO, A.G., dotsent; RUSSKIY, I.I., dotsent; NOVICHKOV, S.I., inzh.

Determination of the most advantageous dimensions of a pit area
in relation to the number of drawing trenches. Izv. vys. ucheb.
zav.; gor. zhur. 5 no.10:11-17 '62.                    (MIRA 15:11)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
Rekomendovana kafedroy otkrytykh gornykh rabot.
                         (Strip mining)

KHITOVENKO, A.F., dotsent

Effect of loading and unloading centers on belt conveyer performance and use. Izv. vys. ucheb. zav.; gor. zhur. no. 11:51-60 '60. (MIRA 13:12)

1. Sverdlovskiy gornyy institut imeni V.V. Vakhrusheva.
Rekomendovana kafedroy otkrytykh gornykh rabot Sverdlovskogo gornogo instituta.
(Conveying machinery)
(Loading and unloading--Equipment and supplies)

DEMIN, A.M., kand. tekhn. nauk; KOKH, P.I.; CHERTKOV, V.K.; VASIL'YEV,
M.V., kand. tekhn. nauk; YEFIMOV, I.P.; KMITOVENKO, A.T., dots.;
PRISEDSKIY, O.V., inzh.; DUNAYEVSKIY, Iu.N.; VOLOTKOVSKIY, S.A.,
doktor tekhn. nauk; KUR'YAN, A.I., kand. tekhn. nauk; MAYMIN,
A.I.; MIROSHNIK, A.M.; PETROV, I.P.; TUKYSHEV, B.P.; SHISHKOV,
A.I.; AVERBUKH, I.D., inzh.; VARSHAVSKIY, A.V.; KRYUKOV, D.K.;
LUKAS, V.A.; MINEYEV, V.A.; SMIRNOV, A.A., otv. red.; LYUBIMOV,
N.O., red. izd-va; MAKSIMOVA, V.V., tekhn. red.

[Handbook for the mechanic in a coal pit]Spravochnik mekhanika
ugol'nogo kar'era. Moskva, Gosgortekhizdat, 1961.  639 p.
                                        (MIRA 15:12)
    (Coal mining machinery--Handbooks, manuals, etc.)

KMITOVENKO, A.T., detsent

Relation between boring and blasting work and the productivity
of belt conveyers. Izv. vys. ucheb. zav.; ger. zhur. no. 4:33-40
'61.                                                    (MIRA 14:6)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
Rekomendovana kafedroy otkrytykh rabot Sverdlovskogo gornogo
instituta.
          (Coal-handling machinery ) (Blasting)

DMITOVENKO, A. T., dotsent; RUBSKIY, I. I., dotsent; NOVICHKOV,
S. I., inzh.

Determining the efficient dimensions of open-pit mine areas.
Izv. vys. uchab. zav.; gor. zhur. no.9:48-56 '61.
(MIRA 15:10)

1. Sverdlovskiy gornyy institut imeni V. V. Vakhrusheva.
Rekomendovana kafedroy otkrytykh rabot.

(Strip mining)

TSEREN SHCHIKOV, P.T., inzh.; KMITOVENKO, A.T., dotsent

Determination of efficient spacing for carrying off rocks which
have been sorted from coal in coal pits.  Izv. vys. ucheb. zav.;
gor. zhur.  6  no.3:13-16  '63.                        (MIRA 16:10)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
Rekomendovana kafedroy otkrytykh gornykh rabot.

KHITOVENKO, A.T., dotsent; YESHTOKIN, A.F., insh.; TSERENSHCHIKOV, P.T., insh.; MOLTUSEV, G.P., insh.

Selecting an efficient variant for finishing up the mining at the Bogoslovskiy brown coal deposit. Izv. vys. ucheb. zav.; gor. zhur. 7 no.11:8-17 '64.                                                  (MIRA 18:3)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana kafedroy otkrytykh gornykh rabot.

KMITOWA, K.

KMITOWA, K.  Problem of diapause among insects. p. 199


Vol 2, no. 3, 1956
EKOLOGIA POLSKA, SERIA B.
SCIENCE
Warszawa, Poland


So:  East European Accession vol 6, no. 3, March 1957

DMITSIKKVICH, Ya. S.: Master Med Sci (diss) -- "The complex treatment of pa-
tients suffering from ulcers". L'vov, 1958. 12 pp (L'vov State Med Inst),
200 copies (KL, No 4, 1959, 131)

KNITSIKEVICH, Ya.S,

Blood transfusion in the compound treatment of peptic ulcers. Vrach.
delo no.9:993 S '57.                                      (MLRA 10:9)

1. L'vovskiy institut perelivaniya krovi i neotlozhnoy khirurgii
(nauchnyy rukovoditel' - prof. I.I.Fedorov) i Pyataya klinicheskaya
bol'nitsa Krasnoarmeyskogo rayona L'vova
       (PEPTIC ULCER)     (BLOOD--TRANSFUSION)

SIEBEROVA, R.; SVOBODA, Z.; KHOCH, J.

Contribution to the study on cured diabetes mellitus. Vnitrni
lek. 11 no.10:989-994 O '65.

1. II. vnitrni klinika fakulty detekeho lekarstvi Karlovy
University v Prase (prednosta prof. Dr. R. Foit, Dr.Sc).

SVOBODA, Z.; FABIAN, D.; KMOCH, J.; SIEBEROVA, R.

Chlorpropamide and tolbutamide test in the diagnosis of diabetes
mellitus. Cas. lek. Cesk. 104 no.45:1239-1242  12 N '65.

1. II. interni klinika fakulty detskeho lekarstvi Karlovy University
v Praze (prednosta prof. dr. R. Folt, DrSc.).

PANOS,J.; KMOCH,J.; KORYCH,B.; FABIAN,D.; KALVODOVA,D.

Apropos of the etiology and clinical aspects of atypical
pneumonia. Cas.lek.cesk. 102 no.50:1371-1374  13 D'63.

1. II interni klinika fakulty detskeho lekarstvi KU v Praze;
(prednosta: prof.dr. R. Foit, DrSc.) a Ustav pro lekarskou
mikrobiologii a immunologii fakulty vseobecneho lekarstvi
KU v Praze (prednosta: prof.dr. F.Patocka, DrSc.).

✳

---

KMOCH JIRI

CZECHOSLOVAKIA / Chemical Technology. Chemical         H-3
Products and Their Application.  Control
and Measuring Devices.  Automatic Regula-
tion

Abs Jour   : Ref. Zhur. - Khimiya, No 2, 1958, No 4920

Author     : Kmoch Jiri, Paul Jaromir
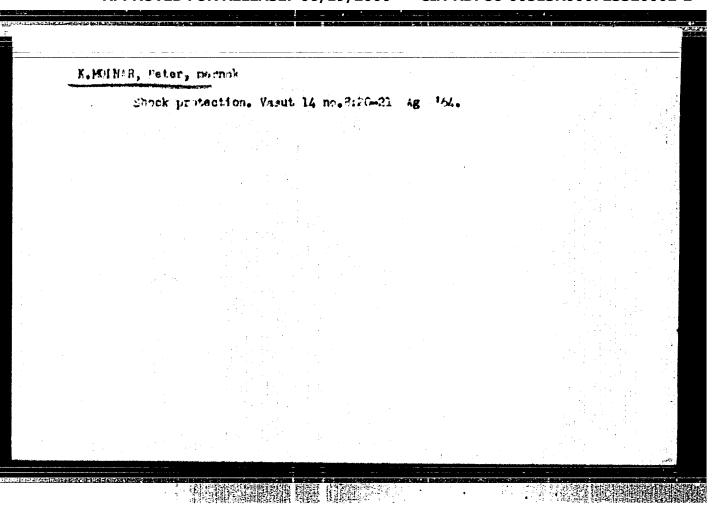
Inst       : Not Given

Title      : Magnetic Level Gauge

Orig Pub   : Chem. prumysl, 1957, 7, No 3, 139

Abstract   : The apparatus consists of a tube of non-magnetic
metal, inside of which a hollow glass float, con-
taining iron foil, is floating on the surface of
the liquid. Outside the tube, suspended from a
filament, is a magnet with a level index, which

Card       : 1/2

: 2/2

K.MOLNAR, Peter, mernok

Shock protection. Vasut 14 no.3:20-21 Ag '64.

DONICEK, J.

Prevention of ocular anaphylactic reaction with antistine and novo-
caine. Cesk.ofth. 6 no.6:339-342 1950.                    (CLML 20:7)

1. Of the Eye Clinic of Masaryk University, Brno (Head—Prof.
B. Slavik, M.D.).

KMONICEK, J.; technicka spoluprace: TOVAREK, J.

Enzymatic activity of the human lens. Cesk.ofth.17 no.2:102-106
Mr '61.

1. Ocni klinika University v Brne, prednosta prof. Dr. Sc. MUDr.
Jan Vanysek. III. vnitrni klinika University v Brne, prednosta
prof. MUDr. PhDr. Jaroslav Pojer.
        (ENZYMES chem)
        (LENS CRYSTALLINE chem)

KMONICEK, J.

Definition of blindness. Cesk. oftal. 20 no.2:143-145 Mr'64.

1. Ocni klinika lekarske fakulty UJEvP v Brne; prednosta: prof. dr. J.Vanysek, DrSc.

HRDLICKA, Jiri, ins., dr.; KACHICKX, Josef

    Production of preboiled rice.  Prum potravin 14 no.5:262-265
    My '63.

    1. Vysoka skola chemickotechnologicka, katedra chemie a skousani
    potravin, Praha (for Hrdlicka).

KMONICEK, V.

The surface steam condenser under changing operational conditions.
p. 117.
STROJNICKY SBORNIK, Prague, No. 8, 1954.

SO:  Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
     June 1956, Uncl.

KVONICEK, V.


Reference data for the conversion of model test results obtained on the
stages of centrifugal compressors.  In English. p. 163.  (ACTA TECHNICA,
Vol. 1, No. 3, 1956, Praha, Czechoslovakia)


SO:  Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

Kaonicek, V.

Measurement of quantities of gas conveyed by a Flue-gas fan.
p. 193. ENERGETIKA. (Ministerstvo paliv a energetiky. Hlavni
sprava elektraren) Praha. Vol. 6, no. 5, May 1956.

Source: EEAL    LC    VOL. 5, No. 10      Oct. 1956

KMONICEK, V.

Arrangement of heat exchangers in gas circuits. V. Kmoníček. Strojírenství 8, 825-831 (1958).—A method for the selection of the best choice of design variables of gaseous regenerative heat exchangers is described, and an example of practical importance is given. The method replaces other more complicated methods.      I. O. Tschinkel

Distr: 4E3d/4E3c

KMONICEK, V.

A accurate high-pressure manometer. p. 2

JEMNA MECHANIKA A OPTIKA. (Ministerstvo presneho strojirenstvi a Ustav pro vyzkum optiky a jemne mechaniky) Praha, Czechoslovakia, Vol. 4, No. 1, Jan. 1959

Monthly List of East European Accessions (EEAI), LV, Vol. 8, No. 7, July 1959 Uncl.

KHONICEK, V.

Turbulent flow in conical diffusers. In German. p. 404.

ACTA TECHNICA. (Ceskoslovenska akademie ved) Praha, Czechoslovakia, Vol. 4, no. 5, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

10.1500

26.2110

21268
R/008/61/000/002/006/008
D235/D304

AUTHOR: Kmonicek, V.

TITLE: Subsonic flow in conical diffusers

PERIODICAL: Studii si certetări de mecanică aplicată, no. 2, 1961, 383 - 390

TEXT: This paper was presented at the Scientific Jubilee Session of the Institutul de mecanică aplicată "Traian Vuia" ("Traian Vuia" Institute of Applied Mechanics) of the Rumanian Academy in Bucharest from July 4 to 7, 1960. The article presents a method of calculating the development of the turbulence in a conical diffuser and the distribution of the velocity and the statical pressure in a section of the current. It also presents the determination of the energy loss of the diffuser in the case of various geometrical shapes and various inlet conditions. The geometrical parameters of the conical diffuser, shown in Fig. 1, are the radius of the inlet section, $r_a$, the angle of divergence, $\epsilon$, and the ratio of the ini-

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D235/D304

Subsonic flow in conical diffusers

tial and final radii, $\rho_e = \dfrac{r_e}{r_a}$. The location of a certain section of a flow, located at a distance x from the inlet is given by the magnitude:

$$\rho = \frac{r}{r_a} = 1 + \frac{x}{r_e}\, \mathrm{tg}\, \delta,$$

The properties of the velocity profile, i.e. the distribution of the velocities in a certain section of the flow are expressed by $\phi$, $\beta$, and $\nu$, defined by:

$$\Phi = e\frac{2g}{C_m^3}; \quad \beta = \frac{C_m}{C_{med}}; \quad \nu = \frac{C_{a,u}}{C_m}. \qquad (1)$$

(1)

in which e is the kinetic energy of the flow in a section, referred to 1 kg of the flowing material, g the gravity acceleration, and $C_m$ the medium flow speed, corresponding to the rate of flow. The magnitude $\phi$ defines the energy effect of the velocities non-symme-

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Subsonic flow in conical diffusers

trical distribution, the magnitude $\beta$ the plain character of the velocity profile, and the magnitude $\nu$ the velocity gradient in the vicinity of the wall. The turbulence intensity is characterized by its medium value according to the rate of flow $T_m$. The magnitudes $\Phi$, $\beta$, and $\nu$ are correlated graphically. The development of the velocity profile in the diffuser may be described by the variation of only one of the mentioned magnitudes. The value of $\Phi$ is given by

$$\Phi = \Phi' - (\Phi' - 1)\,\exp\left(-\frac{2\,000}{\rho^4\,\Omega}\right), \qquad \checkmark \qquad (5) \qquad\qquad (5)$$

in which $\Omega$, characterizing the energy of the turbulent motion is given by

$$\Omega = \frac{1}{\operatorname{tg}\delta}\left[\frac{1}{2}\,(\rho^2 - 1) + \left(\frac{T_m}{3,5} - 1\right)I_1 + \right.$$

$$\left. + \left(\frac{T_m}{3,5} - 1\right)^2 I_2 + \left(\frac{T_m}{3,5} - 1\right)^3 I_3\right].$$

(6)  (6)

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D235/D304

Subsonic flow in conical diffusers

The factors $I_1$ through $I_3$ have been compiled in tabulated form to facilitate the calculations. The relation (5) expresses the fact that the turbulent motions at the flow through a diffuser have the tendency to equalize the velocity profile. The values $\phi'$ depend on the inlet conditions and on the following magnitudes:

$$\beta_b = 0,703 + 0,0255 \log A_{**}. \qquad \qquad (7) \qquad \qquad (7)$$

The author then determines $\phi'$ for $\beta_a < \beta_k$, $\rho < \rho_k$, $\rho > \rho_k$, and $\beta_a > \beta_k$. $I_1$ through $I_3$ are determined by Eq. (6). The values of the relative losses in the diffuser are compiled in Fig. 5. This calculation method is valid in a wide field of geometrical parameters of the diffusers and of their aerodynamical inlet conditions, except for rotation. Its accuracy is sufficient for its application in engineering. The derivation of the method is found in the following papers of the author: Teoretické a experimentální ni objasneni jevu pri podzvukovem proudeni v kanalech kruhoveho prurezu

Card 4/7

Card 5/7

Z/030/62/000/001/001/001
E197/E435

AUTHOR:    Kmoníček, Vl, Engineer Doctor, Candidate of Science

TITLE:    Accurate measurement of small temperature
differences with resistance thermometers

PERIODICAL: Jemná mechanika a optika, no.1, 1962, 19-23

TEXT:    The author describes a method of measuring small
temperature differences by platinum resistance thermometers which
will give an accuracy in the order of 0.01°C without the necessity
of accurate standardization.    The author rejects Beckmann
thermometers and thermocouples because both need comparison with
standard thermometers, the accuracy of which is nearly the same
as required for the author's purpose.    However, platinum
thermometers can be relied upon to change their resistance
accurately and the author has used a bridge with which an
accuracy of 0.01°C is obtainable without the necessity of
accurate calibration.    The equipment consists of two resistance
thermometers (Heraeus type 6011), standard resistances (tolerance
1 in 10000), decade resistance boxes (type Metra XLLk or XL6),
a galvanometer (Zeiss), a battery, a milliammeter and a
changeover switch and a self-made switchboard.    The latter is
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Z/030/62/000/001/001/001
E197/E435

Accurate measurement of small ...

made of perspex and brass strips with appropriate holes for
stoppers. With the equipment the following tests can be carried
out: measurement of the difference in the resistance of the
leads and the arms of the bridge; measurement of difference in
the resistance of both thermometers; measurement of resistance
of one of the thermometers and measurements as above but with
reversed polarity of the current. The purpose of the
arrangement is to eliminate such errors in resistance
measurement which are not due to temperature. The author then
develops the mathematical analysis of the errors which may occur
in temperature determination and uses the standard equation for
resistance thermometers:                                        (14)

$$R = R_0 (1 + At + Bt^2)$$

in which $R_0$ is the resistance at $0°C$; A and B - constants;
t - temperature. The thermometers used by the author had an
approximate resistance $R_0$ of 100 ohms, the value A was
approximately $3.9 \times 10^{-3}/°C$ and B approximately $5.9 \times 10^{-7}/°C^2$.
Considering the very small difference in the parameters of the
Card 2/4

Accurate measurement of small ...       Z/030/62/000/001/001/001
                                         E197/E435

thermometers found by the author and the technique of making an
accurate comparison of the resistance of the pair of thermometers
to be used at the initial temperature, the author defines a
value of $x_0$ as the error which would appear at a temperature of
500°C and relates all other errors to that value, obtaining

$$x_{\Delta t} = \frac{\Delta t}{245}\sqrt{0.001 + \frac{1}{\Delta t^2} + 0.25\,x_0^2}.\qquad(31)$$

in which $\Delta t$ is the temperature difference to be measured and
$x_{\Delta t}$ the error of measurement. Assuming $x_0$ as 0.2°C, all
errors within a temperature difference of 20°C will be less than
0.01°C, according to the formula. In order to verify the
theoretical evaluation, the author has used three platinum
resistance thermometers of the type Heraeus 6011, which were
calibrated by the makers in the range of 0 to 500°C with a
maximum error of 0.2°C. The thermometers were paired in the
three possible combinations and the change of the difference in
resistance of the pair measured between 80 and 180°C at constant
temperature. The test equipment consisted of a Wobser U8
Card 3/4

AUTHORS:      Jůza, Jan, Kmoníček, Vladimir, Šifner, Oldřich

TITLE:        Specific volume and equation of state of water in the range of 500 - 3,500 bars and 80 - 350°C

PERIODICAL:   Referativnyy zhurnal, Fizika, no. 8, 1962, 7, abstract 8D52 ("Acta techn." (CSSR), 1961, v. 6, no. 6, 553 - 572, English; summary in Russian)

TEXT:        An experimental device for determining the specific volumes of liquids and gases in the range of 80 - 350°C and 500 - 3,500 bars is described. A preliminary testing has shown this device to permit measurements with the following limit errors: specific volume, 0.001 cm$^3$/g, temperature, 0.2°C, and pressure 10 bars. Results of a specific water volume determination are presented. The experimental data obtained are compared with those of other authors. Divergences do not exceed the error limits mentioned above. An equation of state for water and steam is suggested in conclusion, and is confronted with experimental data of a number of authors. In the range investigated by the authors

Card 1/2

8/081/62/000/017/014/102
B165/B180

AUTHORS:     Juza, Jan, Kmoníček, Vladimír, Sifner, Oldrich

TITLE:       Specific volume and equation of state of water in the range
             of 80 - 350°C and 500 to 3500 bars.

PERIODICAL:  Referativnyy zhurnal, Khimiya, no. 17, 1962, 39, abstract
             17B250 (Acta techn. (ČSSR), v. 6, no. 6, 1961, 553-572
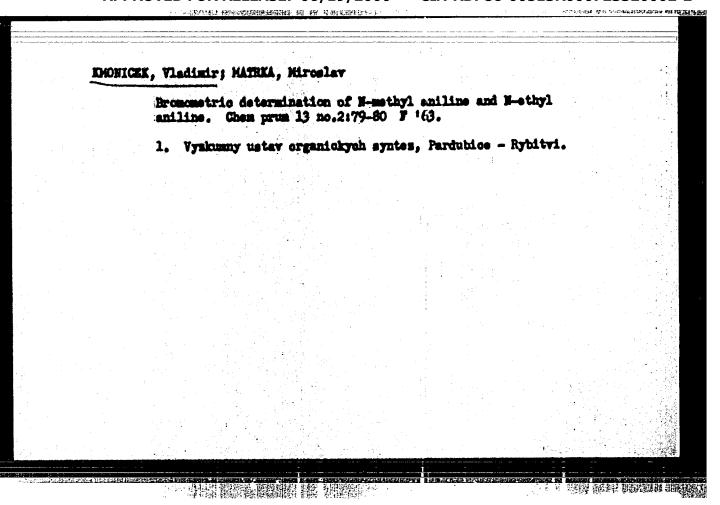             [Eng.; summary in Russian])

TEXT:   The article describes equipment for measuring the specific volume
of water vapor at 80 - 350°C and a pressure of 500 - 3500 bars with an
accuracy of 0.001 $cm^3/g$ (spec. vol.), 0.2°C (temp.) and 10 bars (pressure).
The results are tabulated. An equation of state is suggested which
describes the experimental data with an accuracy of 0.2%. [Abstracter's
note: Complete translation.]

'Card 1/1

IMONICEK, Vladimir, ins., dr., C.Sc.
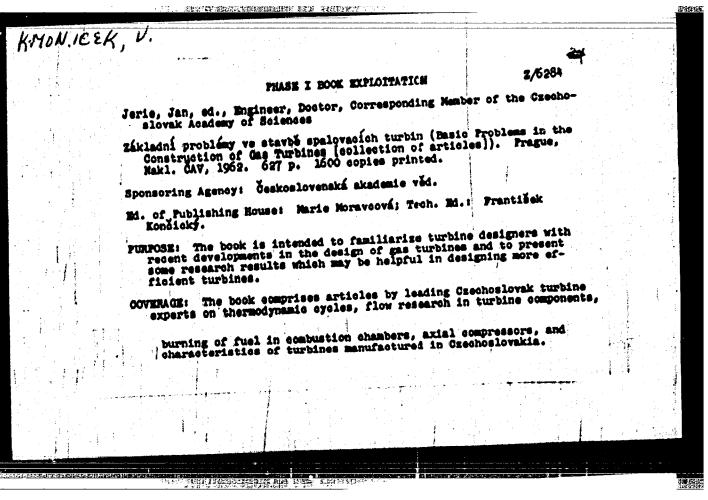
Thermal problems of the new high temperature conversions of energy. Tech praca 14 no.5:341-344 My '62.

1. Ustav pro vyzkum stroju, Ceskoslovenska akademie ved, Praha.

KMONICEK, Vladimir; MATRKA, Miroslav

Bromometric determination of N-methyl aniline and N-ethyl aniline. Chem prum 13 no.2:79-80 F '63.

1. Vyskumny ustav organickych syntes, Pardubice - Rybitvi.

*KMONICEK, V.*

PHASE I BOOK EXPLOITATION

Z/6284

Jerie, Jan, ed., Engineer, Doctor, Corresponding Member of the Czecho-
slovak Academy of Sciences

Základní problémy ve stavbě spalovacích turbin (Basic Problems in the
Construction of Gas Turbines (collection of articles)). Prague,
Nakl. ČAV, 1962. 627 p. 1600 copies printed.

Sponsoring Agency: Československá akademie věd.

Ed. of Publishing House: Marie Moravcová; Tech. Ed.: František
Končický.

PURPOSE: The book is intended to familiarize turbine designers with
recent developments in the design of gas turbines and to present
some research results which may be helpful in designing more ef-
ficient turbines.

COVERAGE: The book comprises articles by leading Czechoslovak turbine
experts on thermodynamic cycles, flow research in turbine components,
burning of fuel in combustion chambers, axial compressors, and
characteristics of turbines manufactured in Czechoslovakia.

Basic Problems in the Construction (Cont.)                    Z/6284

L. Michalička (State Research Institute for Heat Engineering,
Prague). The Use of Gas Turbines in Industrial Processes          77

J. Jerie (State Research Institute for Heat Engineering,
Prague). Combustion Turbines of Highest Efficiency               95

V. Kaoníček (Institute for Machine Research, Czechoslovak
Academy of Sciences, Prague). Some Heat Recovery Problems
in Gas Turbine Cycles                                            119

L. Krejčí (Institute for Machine Research, Czechoslovak Acad-
emy of Sciences, Prague). Problems Related to a Temperature
Increase in Gas Turbines                                         141

Z. Bayer (Institute for Machine Research, Czechoslovak Academy
of Sciences, Prague). The Effects of Interstage Cooling, Re-
heating, and Precooling in Gas Turbine Cycles                    161

Card 3/8    2/2

JUZA, Jan, ins. dr.; KMONICEK, Vladimir, ins. dr., CSc.;
SCHOVANEC, Karel, inz.

Joule-Thomson coefficient of $H_2O$ and $D_2O$ in the range of
1,2 - 1,8 bars and 130° - 190°C. Stroj cas 14 no.5:467-483
'63.

1. Zavody V.I. Lenina, Plzen (for Juza). 2. Ustav pro vyzkum
stroju, Ceskoslovenska akademie ved, Praha (for Kmonicek and
Schovanec).

DMONICEK, Vladimir, ins. dr., CSc.

Effect of inserted bodies on the activity of simple conical diffusers. Stroj cas 14 no.5:484-498 '63.

1. Ustav pro vyzkum stroju, Ceskoslovenska akademie ved, Praha.

KHONICEK, V., ins. dr.; MASTOVSKY, J., ins.

Contribution to the design of membrane shock tubes.
Strojirenstvi 14 no.1:13-19 Ja'64.

1. Ustav pro vyskum stroju, Ceskoslovenska akademie ved.

KMONICEK, Vladimir, ins. dr. DrSc.; SLEPICKA, Frantisek, ins. CSc.

Thermophysical properties of gases at high temperatures and
methods of determining them.  Stroj cas 16 no.2:119-121  '65.

1. Institute of Thermomechanics of the Czechoslovak Academy of
Sciences, Prague.

KMONICEK, Vladimir, ina. dr. DrSc.; MASTOVSKY, Jiri, ina.

Methods of calculating thermodynamic properties of gases at high temperatures. Stroj cas 16 no.2:121-128 '65.

1. Institute of Thermomechanics of the Czechoslovak Academy of Sciences, Prague. Submitted October 5, 1964.

KMONICEK, Vladimir, ins. dr. Drsc.

Possibility of measuring gas thermal conductivity in a shock
tube. Stroj cas 16 no.2:139-148 '65.

1. Institute of Thermomechanics of the Czechoslovak Academy of
Sciences, Prague. Submitted October 5, 1964.

KMONICEK, Vladimir, Ins. dr. DrSc.; KOREJS, Bretislav

Some remarks on the technology of manufacturing and calibrating thin-film resistance thermometers.  Stroj cas 16 no.2:240-246 '65.

1. Institute of Thermomechanics of the Czechoslovak Academy of Sciences, Prague.  Submitted October 5, 1964.

L 00200-66   ENT(1)/ENP(m)/EWA(d)/PCS(k)/EWA(h)/EWA(c)    WW
ACCESSION NR:  AP5013161                    CZ/0041/65/000/002/0139/0148

AUTHOR:  Kmonicek, Vladimir (Kmonichek, V.) (Engineer, Doctor, Doctor of sciences)

TITLE:  Possibility of measuring the thermal conductivity of gases in shock tubes

SOURCE:  Strojnicky casopis, no. 2, 1965, 139-148

TOPIC TAGS:  heat conductivity, real gas, gas property, shock tube, reflected shock
wave

ABSTRACT:  The article presents a theoretical analysis of the possibilities offered
by a shock tube for measuring the thermal conductivity of real gases. The analysis
is based on smiley's method, which involves measurement in the space behind the
reflected shock wave, and in which the thermal conductivity is determined from the
temperature jump at the wall of the end-plate of the tube. Particular attention is
given to conditions of thermodynamic equilibrium, derivation of the energy transfer
equation for a radiating and chemically reacting gas, establishment of a sufficient
value for the space behind the reflected shock wave, and effect of radiation flux
and errors in the measurement of thermal conductivity as determined from the
temperature jump at the end-plate of the tube. It is pointed out that the space
behind the shock wave is convenient for measurement, but the measurement of the
Card  1/2

Card  2/2

L 00151-66    EWT(d)/EWT(m)/EWP(1)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(1)
ACCESSION NR:  AP5013192 IJP(c)    JD/JG    CZ/0041/65/000/002/0240/0246

AUTHOR:  Kronicek, Vladimir (Kronichak, V.) (Engineer, Doctor of sciences);
Koreja, Bretislav (Koreys, B.)

TITLE:  Some notes on the manufacture and calibration of thin-film thermometers

SOURCE:  Strojnicky casopis, no. 2, 1965, 240-246

TOPIC TAGS:  platinum, resistance thermometer, metal film, time measurement

ABSTRACT:  A new type of sensing element for measuring rapid changes in surface
temperature is described which can be used both for temperature determinations
and for measuring time intervals. The element is vacuum tight, shock-resistant,
and easy to assemble. Deposition of its platinum resistance film can be
accomplished both chemically and by vaporization in a vacuum; experience with
both of these methods of preparation is described. Chemically deposited films
are preferred for time-measuring elements, while films obtained by vacuum
deposition are more suitable for temperature-sensing elements. Nonstationary
methods of measuring the thermophysical properties of the insulating substrate
onto which the platinum layer is deposited are discussed. Knowledge of these
properties is necessary for determining the heat flux entering the wall.
Card 1/2

KPOSKO, K.

New bridge over the Danube at Komarom. P. 19. MUSZAKI ELET. Budapest
Vol. 9, No. 18, Dec. 1954

SOURCE: East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 6, June 1956

KOCSIS, K.

KOCSIS, K.   Reconstruction of the brickwork of the railroad bridge at Komarom.
p. 490.

Vol. 5, No. 11, Nov. 1955.
MELYEPITESTUDOMANYI SZEMLE.
TECHNOLOGY
Budapest, Hungary

So: East European Accession, Vol. 5, No. 5, May 1956

KMOSKO, K.

KMOSKO, K.  The railroad bridge over the Danube near Komarom, p. 197.

Vol. 6, No. 5, May 1956.
MELYEPITESTUDOMANYI SZEMLE
TECHNOLOGY
Budapest, Hungary

So:  East European Accession, Vol. 6, No. 2, Feb. 1957

KMCSKO, K.

Railroad culverts.

P. 307. (MELYEPITESTUDOMANYI SZEMLE.) (Budapest, Hungary) Vol. 7, No. 9/10,
Sept./Oct. 1957

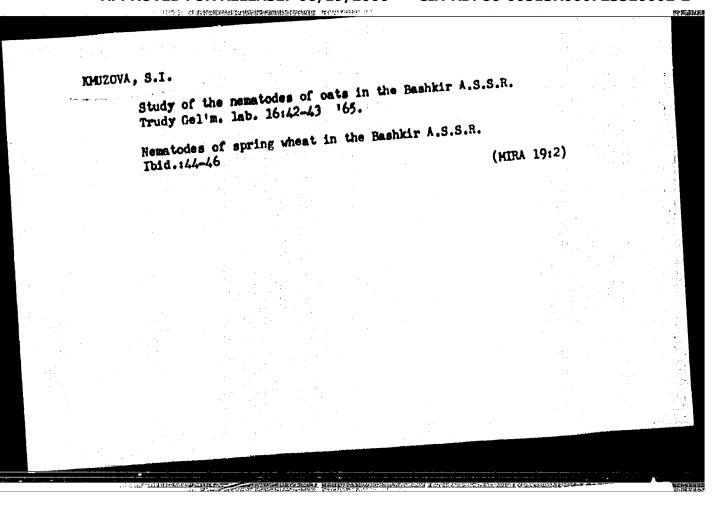SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, 1958

KNOTRIK, F.

Remarks on a conference. p. 25

MUSZAKI ELET, No. 10, May 1955

(Muszaki es Termeszettudomanyos Egyesuletek Szovetsege) Budapest

SOURCE: East European Accessions List Vol. 5, No. 1 September, 1956

KHUZOVA, S.I.

Study of the nematodes of oats in the Bashkir A.S.S.R.
Trudy Gel'm. lab. 16:42-43 '65.

Nematodes of spring wheat in the Bashkir A.S.S.R.
Ibid.:44-46

(MIRA 19:2)

KNAB, O.D.

C-2

USSR/Electricity - Dielectrics

Abs Jour    :  Ref Zhur - Fizika, No 1, 1958, 1235

Author      :  Knab, O.D.
Inst        :  —
Title       :  Emission of Electrons by Irradiated and Mechanically-Worked
               Dielectrics.

Orig Pub    :  Pratsi Odes'k, un-tu, Tr. Odessk. un-ta, 1956, 146, 36,
               stud. robit, Sb. stud. rabot, No 4, 157-159

Abstract    :  A study is made of the emission of electrons upon pulveri-
               zing and exposure of Rochelle salt, corundum, pyrite, and
               quartz to ultraviolet light. Attempts are made to explain
               the observed phenomena.

Card 1/1

82460
s/112/60/000/006/002/032

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1960, No. 6, p. 12,
# 1.1519

AUTHOR:     Knab, O. D.

TITLE:     To the Problem of Electric Breakdown of Crystalline Dielectrics

PERIODICAL:  Tr. Odessk, un-ta, Sb. molodykh uchenykh un-ta, 1958, Vol. 148,
No. 3, pp. 63-65 (Ukrainian)

TEXT:     A possibility of breakdown of crystalline dielectrics as a result of
the origination of mechanical forces under the action of an electric field is
discussed. In places of crystal lattice distortions or in the presence of defects,
microscopic cracks can form in a crystal under the action of an electric field.
The side walls of the cracks become electron suppliers. These electrons are
accelerated by the field to the values of energy necessary for a "shock breakdown".
The author objects to the theory of cumulative ionization of V. A. Chuyenkov,
since an electron must pass without collisions $10^5$-$10^7$ of lattice constants at a
field of ~1 Mv/sec to attain the energy necessary to release an atom or ion from
a lattice node. The emergence of an electron with such an energy is impossible
owing to high ionization expenses. There are 6 references.

A. A. V.

Card 1/1

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24(2), 24(3), 24(4) 24.7800                    SOV/155-59-1-28/30

AUTHOR:      Knab, O.D.

TITLE:       Exoelectronic Emission of Some Dielectrics

PERIODICAL:  Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki,
                                        1959, Nr 1, pp 179-184 (USSR)

ABSTRACT:    The author reports on the experimental investigation of the
             exoelectronic emission of dielectrics after a mechanic treat-
             ment, radiation, and electric discharge. It is stated that
             during a mechanical treatment the dielectrics emit electrons,
             where the intensity of the radiation depends on the degree of
             the treatment (splitting). Crystals which already have
             "radiated" show a secondary exoelectronic emission after an
             radiation with ultraviolet light or X-rays. The same effect is
             caused by an electrical discharge. The course of the emission
             is equal in all cases. For a repeated radiation the emission
             maximum becomes smaller, i.e. there appears an aging of the
             samples. Finally it is tried to interpret the observed phe-
             nomena.
             The author thanks Docent T. Ya. Sere for guidance and

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.                B102/B202

24.3500 (1137,1138)

AUTHOR:     Knab, O. D.

TITLE:      Exoelectron emission of colored crystals

PERIODICAL: Fizika tverdogo tela, v. 3, no. 8, 1961, 2293 - 2297

TEXT:  In the present paper the author presents results obtained when
studying the thermal exoelectron emission, the thermoluminescence, and
the temperature dependence of the conductivity of colored quartz. If
crystals emitting electrons at a given temperature are further heated,
this electron emission shows maxima at temperatures which are considerably
lower than the temperature of thermionic emission. This thermionic
emission is especially high in crystals colored by X-irradiation. If
thermoluminescence and thermionic emission in such crystals are studied
simultaneously, conclusions on electron emission can be drawn from the
results obtained. According to the most recent theory, exoelectron
emission can be regarded as a thermionic emission from traps. This con-
cept, however, is not generally accepted since in some cases the electron
surface states play a certain part. The studies described here were made

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in quartz powder which had been colored by X-irradiation at room temper-
ature (6 hr, 30-kv, 10-ma X-ray tube, Cu anticathode). All samples were
heated at a rate of 0.1 deg/sec. The following experimental results
were obtained: experiments concerning the thermal excitation of quartz
were made in single crystals; the samples showed two distinct maxima in
the ranges 150 - 200 and 250 - 300°C which is in good agreement with
results obtained by other authors. The thermoluminescence of the powder
was less intense. The temperature dependence of thermionic emission
shows a much more complicated course than that of thermoluminescence. At
170°C a distinct peak is observed which coincides with thermoluminescence
but is somewhat higher. A second peak lies at 270°C. In general, the
peaks of exoelectron emission and thermoluminescence do not coincide but
are shifted by 10 - 30° with respect to each other. A study of the tem-
perature dependence of the conductivity of quartz powder showed that
conductivity increased by orders of magnitude with temperature. Com-
parative measurements of the temperature dependence of the conductivity
of X-ray excited quartz plates showed only an inconsiderable effect as
compared with that in powder. The results showed that the peaks of
electron emission are due to processes that are connected with the

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ionization of trapping centers in the interior of the crystal. Besides these electron emission sources there exists still a considerable amount of surface and surface-near traps which - as was shown by the measurements of thermal conductivity of quartz - are filled with electrons and may largely contribute to exoelectron emission. This proves that exoelectron emission is due not only to volume but also to surface processes. Finally, the author thanks Docent T. Ya. Sere for discussions and B. I. Soldatov for carrying out the measurements. There are 3 figures and 17 references: 13 Soviet-bloc and 4 non-Soviet-bloc.

ASSOCIATION: Odesskiy gosudarstvennyy universitet im. I. I. Mechnikova
(Odessa State University imeni I. I. Mechnikov)

SUBMITTED: February 23, 1961

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KNAB, O.D.

Exoelectronic emission of colored crystals. Fiz. tver.
tela 3 no.8:2293-2297 Ag '61.                    (MIRA 14:8)

1. Odesskiy gosudarstvennyy universitet im. I.I.Mechnikova.
                (Electrons—Emission)
                (Color centers)

39977
S/181/62/004/008/022/041
B102/B104

AUTHOR:     Knab, O. D.

TITLE:      The stimulated photoeffect of some dielectrics and its
            connection with the afteremission effect

PERIODICAL: Fizika tverdogo tela, v. 4, no. 8, 1962, 2193-2200

TEXT:   The author studies the dependence of the photoeffect on the period
of time after stimulation (coloring, crushing) and its relation to the
afteremission in greater detail than has been done up to now.  His
measurements were made on crushed crystals of natural $CaF_2$, $CaCO_3$ and
$SiO_2$ giving rather intense emission after irradiation by white light (3w).
Pre-illumination with blue light caused coloring and raised the activity
most strongly of $CaF_2$, least of $CaCO_3$.  The photoeffect of all crystals
was stimulated by crushing and covered a wide spectral range.  The
spectral distribution of the stimulated photoeffect, e. g. of $CaF_2$,
ranged from about 300 to 950 mμ with a high intensity peak at about 400 mμ.

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treatment is discussed; this mechanism can be single- or multi-staged.
Stimulated photoeffect and afteremission depend in each case on the
presence of color centers.  There are 5 figures.

ASSOCIATION:  Odesskiy gosudarstvennyy universitet im. I. I. Mechnikova
              (Odessa State University imeni I. I. Mechnikov)

SUBMITTED:    March 27, 1962

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KNAB, O.D.

Stimulated photoeffect from certain dielectrics and its
relation to the phenomenon of exoelectronic emission.
Fiz. tver. tela 4 no.8:2193-2200 Ag '62.        (MIRA 15:11)

1. Odesskiy gosudarstvennyy universitet imeni I.I. Mechnikova.
   (Photoelectricity)                (Electrons—Emission)